

Notice of Allowability

Application No.

09/626,982

Examiner

CHAMELI C DAS

Applicant(s)

SCHMIDT, WILLIAM JON

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the appeal brief filed on 6/22/04.
2. ☒ The allowed claim(s) is/are 12-19, 24-35 (newly numbered claims are 1-20).
3. ☒ The drawings filed on 27 July 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892) ♦
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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1. This action is in response to the Appeal Brief filed on 6/22/04.
2. Claims 1-11 and 20-23 have been canceled.
3. Claims 12-19, 24-35 have been allowed.

REASON FOR ALLOWANCE

4. The following is an examiner's statement of reason for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, a method for calculating approximations of sets of entry and exit properties for each basic block of a computer procedure prior to performance of an iterative dataflow analysis. Specifically, the entry properties of a currently selected basic block, are copied from exit properties of a previously selected and processed basic block; and modifying the set of entry properties of the currently selected basic block in accordance with the property modifications caused by the currently selected basic block, to generate the exit properties for the currently selected basic block, as recited in the independent claims 12, 24 and 32.

Conclusion

5. The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Method of producing object program based on interprocedural dataflow analysis of a source program, US 5146594 A

TITLE: Partitioning optimizations in an optimizing compiler, US 5193190 A

TITLE: Computer with instructions that use an address field to select among multiple condition code registers, US 5517628 A

TITLE: Compiling with partial copy propagation, US 5937196 A

TITLE: Control flow and memory management optimization, US 6064819 A

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TITLE: Tracking loop entry and exit points in a compiler, US 6253373 B1

TITLE: Method of using primary and secondary processors, US 6219833 B1

TITLE: A Comprehensive Approach to Parallel Data Flow Analysis, author: Lee et al, ACM, 1992.

TITLE: Evaluation of Predicated Array Data-Flow Analysis for Automatic Parallelization, author: Moon et al, ACM, 1999.

TITLE: Compiling Dynamic Mappings with Array Copies, author: Fabien Coelho, ACM, 1997.

TITLE: Using Dataflow Analysis Techniques to Reduce Ownership Overhead in Cache Coherence Protocols, author: Skepstedt et al, ACM, 1996.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli C. Das whose telephone number is (703) 305-1339. The examiner can normally be reached on 7-3:30.

After October 28, 2004, the examiner can be reached at new telephone number (571) 272-3696, and the examiner's supervisor Tuan Dam can be reached at (571) 272-3695.

An inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-9600.


CHAMELI C. DAS
PRIMARY EXAMINER

10/24/04